



## The Lake Erie Regional Grape Program



Crop Update for January 9, 2014



Enrollment is underway and going along well. You probably received an enrollment card from the Chautauqua County CCE office, but noticed that there is no line to enroll in GRAPES. New this year, we will be handling Chautauqua County LERGP enrollment in house. This means that if you only want to enroll for the Grape program, all you have to do is fill out our enrollment form and mail it to the CLEREL lab in Portland or you may also opt to enroll on-line using a credit card. You send NOTHING to the CCE office in Chautauqua county.

You may access our enrollment form by going to our web-site at <http://lergp.cce.cornell.edu/>, clicking enrollment and clicking the pdf enrollment form line. You may print this form and mail it in or drop off. For your convenience, I am including a copy in this update as well. If you choose to use a credit card and enroll on-line, simply fill out the form on-line and submit. I will receive an e-mail letting me know you have enrolled.

If you have any questions about this process, please feel free to call or e-mail Katie at any time at 716-792-2800, extension 201, or [kjr45@cornell.edu](mailto:kjr45@cornell.edu).

Visit our LERGP Website at: <http://lergp.cce.cornell.edu/> for a detailed calendar. Please remember to RSVP for those events that require one!

Let us know if you have changed or are in the process of changing your email address so we can keep the Electronic Crop Update coming to your inbox!

Please email Kate Robinson at: [kjr45@cornell.edu](mailto:kjr45@cornell.edu)

## Pruning Labor Market

The market for pruning labor remains largely unchanged since last year. Pockets of shortages do persist, but overall supply seems to be adequate for the needs of most growers. The isolated shortages do appear as though early spring renewal work will be challenging to complete.



The average cost of pruning per acre remains between thirty-five and forty cents per vine. This cost trends downward as one heads southwest. Direct costs of pruning are averaging close to thirty cents. Direct labor costs as well as benefit costs are slightly lower in Pennsylvania. FICA, workers compensation, unemployment insurance and liability insurance add an additional four cents per vine. Unpaid labor for a grower's time spent doing payroll, management, and labor recruitment add an additional two cents per vine. Effective management, based on benchmark studies, would double that cost. Typically, effective management requires 8% of the labor time or 2.5 cents per vine.

Despite the additional, unseen costs of pruning, the decision to transition remains complex. The biggest disadvantage of hand pruning is not yet the actual cost. It is the risk of a labor shortage at a critical time. Some growers can make the switch entirely. Full-time employees handle hand follow-up and renewals. Others still rely on traditional migrant labor. Mechanized pruning can make the recruitment for these employees challenging. Building relationships and increasing rates of pay before a transition may be prudent.

Local unemployment rates remain between 7.0 – 7.9%. While this has virtually nothing to do with the pruning labor market, for now, the ability to get full time workers at affordable rates continues to be a practical option. While these laborers are not all created equal, it does allow growers to smoothly transition to mechanized pruning.

This year the growth in mechanization continues. Manufacturers of machine pruners report a steady growth in demand. As it has been for the past three years, prices for mechanized pruning are slightly less than hand pruning. The least cost option typically includes hand follow-up if grapes are expected to meet brix standards. The use of machine pruners has increased in variability. The purchase or construction of a machine no longer guarantees a farm's transition to mechanization. Phasing in a practice can be useful to minimize risk. Be sure, though, to evaluate farm size relative to the investment. Leasing or contract work can also be a practical way for less acreage to transition to mechanization.

## NEWA Update

The Portland Rainwise weather data logger (located at CLEREL) is back on line and downloading to the NEWA website, <http://newa.cornell.edu> . When this unit went off line we took the opportunity to upgrade the communications hardware so the delivery of data should be more robust and reliable. Using the IP-100 interface (bypasses the computer used in the old set up and hooks directly to the internet) the Portland logger is now downloaded, the information displayed on the NEWA website, every 15 minutes rather than hourly as in the past. While the information is reported on the website on an hourly basis, downloading every 15 minutes provides 4 packets of information every hour rather than one. This is extremely helpful in the collection of weather information specific to a site if communication between the machine and the communication hardware is unsuccessful for any reason. If communication drops once during the hour there are still 3 packets of weather information that can be averaged for that hour. If you have been on the NEWA site before and have seen brown italicized data in the hourly, or daily readings this indicates the information is estimated from a nearby location, or sister station, to fill in the missing data.

How low did it go? As Luke mentions in his article, you can use NEWA to find the low temperatures for a number of weather stations in the Lake Erie Region using the daily summary page for any of the stations. While it is nice to know how low did it go, it is also important to have a handle on the temperatures preceding the cold as well as how long the temperatures stayed at those low temperatures. This type of information can be found by accessing the hourly data found in the Weather Data Quick Links on the left side of each Station Page. For example, to find this information for the Portland logger,

1. Log onto the NEWA website at <http://newa.cornell.edu>
2. Select Portland using the pull down menu for Station Pages in the blue ribbon at the top of the page.
3. In the left hand column of the Portland Station Page find the heading Hourly Data under the Weather Data Quick Links and click on Jan
4. You can now scroll through the hourly weather data for Portland from Midnight on January 1, 2014 until the present time.

When you do this, you will see that temperatures first went below zero (-0.2 F) at 6 PM on January 1, followed by three hours where we bounced back up above zero before dropping below zero again for 20 straight hours. The low at Portland was -10.1 F for one hour at 7 AM on January 7.

If you have any questions on how to access weather information on NEWA for sites near you please give me a call or stop in the office and I would be happy to assist you.





## First Look at the “Deep Freeze”

Luke Haggerty

The Lake Erie grape region experienced extremely cold temperatures as the ‘Polar Vortex’ moved through early this week. As the region went into the deep freeze I receive some questions about wind chill and the effect it has on grapes. Wind chill only affects warm blooded animals and does not affect plants. What we are most concerned about is the minimum daily temperature as this is what affects plant tissue. Minimum temperatures dipped as low as -11 °F, raising other questions about winter injuries. A great resource to gain access to all weather information throughout the region is the NEWA website, <http://newa.cornell.edu>.

Location	Min Temperature °F
Harborcreek, PA	-10.4
Northeast Lab	-10.9
Ripley, NY	-10.1
CLEREL (Portland)	-10.1
Silver Creek, NY	-8.0
Sheridan, NY	-6.7
Versailles, NY	-9.6
Somerset, NY	-5.6
Weather data listed was collected using NEWA weather station on 1/7/14	

Grapevines avoid freeze damage through two mechanisms. Buds are protected by a process called supercooling, which is the ability of cell content in the buds to remain liquid at sub-zero temperatures. Trunk and cane tissue avoid freezing by cell dehydration or desiccation. However, all grape varieties have a breaking point where cell tissues can no longer handle lowering subzero temperatures and the plant tissues freeze. The good news is the timing of this cold snap happened when the vines are in there most dormant stage or at maximum hardiness. There will be bud damage in tender, moderately tender, and moderately hardy varieties (see table below). The extent of this damage is still unknown. I will be reporting on bud hardiness and expected bud loss in the upcoming crop updates. If you have concerns about excessive bud damage we can do a bud assessment here at CLEREL. Call me at (716) 792-2800 Ext. 204 or email me at [llh85@cornell.edu](mailto:llh85@cornell.edu) to set up a site visit or an appointment.

Cold hardiness class	Range of Critical low temperatures	Species	Example of Cultivars
Tender	0 °F to -8 °F	Most <i>V. vinifera</i>	Chardonnay, Cabernet Sauvignon, Gewürztraminer, Pinot noir & gris
Moderately tender	-5 °F to -10 °F	Some <i>V. vinifera</i> & hybrids	Riesling, Cabernet franc, Chambourcin
Moderately hardy	-10 °F to -15 °F	Most hybrids	Cayuga White, Chardonel, Traminette, Norton, Seyval blanc, Vignoles
Hardy	-15 °F to -20 °F	Most <i>V. labrusca</i>	Catawba, Concord, Delaware, Niagara
Very hardy	-20 °F to -30 °F	Some hybrids	Frontenac, Foch, La Crescent, Marquette
Temperatures that will kill 50 percent of primary buds, or LT <sub>50</sub> . Temperature is expressed as a range because it varies with cultivar, season, environment, and cultural practices. Table taken from <i>Winter Injury to grapevines and methods of Protection</i> (Zabadal et al. 2007).			

# 2014 LERGP WINTER GROWERS CONFERENCE

MARCH 20, 2014

AT SUNY FREDONIA, WILLIAMS CENTER

Full Day Conference, 8:00am-4:15pm, with  
morning and afternoon talks, Buffet Lunch and  
Trade-Show!

- Management Strategies for High Yield
- GIS and Sensor Technology
- GPS Sprayer Technology
- GBM
- Cover Cropping
- Grape Rootworm/Japanese Beetle

Including Discussion panels with input  
from local growers who have experience in  
each related area

THE ENTIRE EVENT WILL BE HELD IN THE WILLIAMS  
CENTER-  
NO TRAVELLING FROM ONE BUILDING TO THE NEXT ON  
THE ICE IN THE COLD!



**2014 Lake Erie Regional Grape Program Growers' Conference**  
**March 20, 2014**  
**Williams Center**  
**SUNY at Fredonia Campus**

6:30 AM	Tradeshow set up begins
7:30 AM	Registration and Tradeshow open
8:20 AM	Welcome
8:30 - 9:30 AM	Implementing Vineyard GIS and Sensor Technology
9:30 – 10:00 AM	Farm Transitioning Strategies
10:00 – 10:30 AM	Break
10:30 – Noon	Management Strategies for High Yields
Noon- 1:30 PM	Lunch and Visit Tradeshow
1:30 – 2:00 PM	Using GPS Sprayer Technology
2:00 – 2:30 PM	Grape Rootworm/Japanese Beetle Project
2:30 – 3:00 PM	Disease Management Update
3:00 – 3:15 PM	Break
3:15 – 3:45 PM	Implementing NEWA in a Vineyard IPM Strategy
3:45 – 4:15 PM	Grape Berry Moth Management
4:15 PM	Adjourn

**LAKE ERIE REGIONAL GRAPE PROGRAM**  
**2014 GRAPE GROWERS' CONFERENCE REGISTRATION FORM**

to be held at SUNY Fredonia Williams Center

on March 20, 2014

**Deadline for registration is March 6, 2014.**

Name (1<sup>st</sup> attendee) \_\_\_\_\_ \$ \_\_\_\_\_

Farm Name \_\_\_\_\_

Address, City, State, Zip Code \_\_\_\_\_

\_\_\_\_\_

Phone \_\_\_\_\_ E-mail \_\_\_\_\_

Are you enrolled in Lake Erie Regional Grape Program (LERGP)? Yes \_\_\_\_\_ No \_\_\_\_\_

REGISTRATION FEES	
LERGP Member 1 <sup>st</sup> attendee	\$ 40.00
Additional attendee on same farm	\$ 35.00
Non- member	\$100.00

**Additional Attendees:**

	\$
	\$
	\$
	\$
	\$

\*Please add a **\$25.00 late fee** for each reservation received after March 6, 2014

**TOTAL \$** \_\_\_\_\_

Please make check payable to **LERGP (Lake Erie Regional Grape Program)** and mail to: Kate Robinson  
LERGP  
6592 W Main Rd  
Portland NY 14769

Name \_\_\_\_\_ NY DEC/PA PDA NUMBER \_\_\_\_\_

Name \_\_\_\_\_ NY DEC/PA PDA NUMBER \_\_\_\_\_

Name \_\_\_\_\_ NY DEC/PA PDA NUMBER \_\_\_\_\_

<u>Date Ck. Rec'd</u>	<u>Amount</u>

Call Kate at 716-792-2800 ext 201 with any questions.



# 2014 Lake Erie Regional Grape Program Enrollment

**\*\*This form is for NY Growers ONLY- PA Growers call 814-825-0900 to register**

## **Fees:**

\$70.00 \$\_\_\_\_\_ **GRAPE Program** -Chautauqua county landowner  
(*\$45.00 program fee, \$25.00 Chautauqua County Base Fee*)

\$65.00 \$\_\_\_\_\_ **GRAPE Program**- Cattaraugus, Erie, NY or Niagara  
(*\$45.00 program fee, \$20.00 County base fee*)

\$100.00 \$\_\_\_\_\_ **GRAPE Program** -Out of Program Region Resident

\$25.00 \$\_\_\_\_\_ 2014 Cornell Guidelines for Grapes

\$25.00 \$\_\_\_\_\_ Hardcopy mailing of Newsletters\*\*\*

Total \$\_\_\_\_\_ (Please make check payable to LERGP)

Program fees do  
not include 2014  
Cornell Guidelines for  
Grapes

I am interested in the educational work of Cornell Cooperative Extension in Niagara, Chautauqua and Cattaraugus County. Any current re-  
corded enrollee 18 years of age and older shall have voting and nominating privileges to hold office in the Association of their local county.

☐ I am 18 years of age or older and signed\_\_\_\_\_

☐ New ☐ Renewal

Farm Name:\_\_\_\_\_

Name:\_\_\_\_\_ Spouse's Name: \_\_\_\_\_

Address:\_\_\_\_\_ City:\_\_\_\_\_

State:\_\_\_\_\_ Zip Code\_\_\_\_\_

Home phone:\_\_\_\_\_ Cell Phone :\_\_\_\_\_

\*\*\*Due to budget constraints, all correspondence will be conducted through e-mail. Please provide your  
e-mail address below. If you would like to receive hardcopies, mark the \$25.00 additional fee line above  
and include with payment.\*\*\*

EMAIL ADDRESS\_\_\_\_\_

Please return form and payment to:

Feel free to call w/ questions:

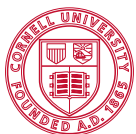
LERGP

716-792-2800 Ext 201

6592 West Main Rd.

Portland NY 14769

Attn: Katie



Cornell University

PENNSTATE



College of  
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Cooperative Extension



## LERGP Website Links of Interest:

Table for: Insecticides for use in NY and PA:

<http://lergp.cce.cornell.edu/submission.php?id=69&crumb=ipm|ipm>

Crop Estimation and Thinning Table:

[http://nygpadmin.cce.cornell.edu/pdf/submission/pdf65\\_pdf.pdf](http://nygpadmin.cce.cornell.edu/pdf/submission/pdf65_pdf.pdf)

Appellation Cornell Newsletter Index:

<http://grapesandwine.cals.cornell.edu/cals/grapesandwine/appellation-cornell/>

Veraison to Harvest newsletters:

<http://grapesandwine.cals.cornell.edu/cals/grapesandwine/veraison-to-harvest/index.cfm>



Go to <http://lergp.cce.cornell.edu/> for a detailed calendar of events.  
Please remember to RSVP for those events that require one!

### **Lake Erie Regional Grape Program Team Members:**

Andy Muza, (ajm4@psu.edu) Extension Educator, Erie County, PA Cooperative Extension, 814.825.0900

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Kevin Martin, (kmm52@psu.edu) Business Management Educator, 716. 792.2800 ext. 205

Luke Haggerty, (llh85@cornell.edu) Grape Cultural Practices, 716.792.2800 ext. 204

This publication may contain pesticide recommendations. Changes in pesticide regulations occur constantly, and human errors are still possible. Some materials mentioned may not be registered in all states, may no longer be available, and some uses may no longer be legal. Questions concerning the legality and/or registration status for pesticide use should be directed to the appropriate extension agent or state regulatory agency. Read the label before applying any pesticide. Cornell and Penn State Cooperative Extensions, and their employees, assume no liability for the effectiveness or results of any chemicals for pesticide usage. No endorsements of products are made or implied.

Cornell University Cooperative Extension provides equal program and employment opportunities.

Contact the Lake Erie Regional Grape Program if you have any special needs such as visual, hearing or mobility impairments.

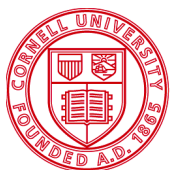
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THE LAKE ERIE REGIONAL GRAPE PROGRAM at CLEREL

6592 West Main Road

Portland, NY 14769

716-792-2800



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